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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,163	07/30/2001	Sunghyun Choi	US 010342	2123

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
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EXAMINER
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CHUNG, PHUNG M

ART UNIT	PAPER NUMBER
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2133

8

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

P24

**Office Action Summary**

Application No.

09/918,163

Applicant(s)

Sunghyun Choi

Examiner

PHUNG CHUNG

Group Art Unit

2133

**—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—**

**Period for Response**

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

**Status**

- ☒ Responsive to communication(s) filed on 4/19/04
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

**Disposition of Claims**

- ☒ Claim(s) 1-19 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-19 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

**Application Papers**

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119 (a)-(d)**

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_

**Attachment(s)**

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_ ☐ Interview Summary, PTO-413
- ☐ Notice of References Cited, PTO-892 ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948 ☐ Other \_\_\_\_\_

**Office Action Summary**

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1. Claims 10 and 15 are objected to because of the following informalities:

As per claim 10, line 1, "claim 8" should be changed to --claim 9--;

As per claim 15, line 9, "w ithin" should be changed to --within--. Appropriate correction is required.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 6-8, and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sipola (WO 0045543).

As per claims 1 and 6-7, Sipola discloses the invention substantially as claimed, comprising the steps of:

- (A) transmitting a sequence of packets from a source node to a destination node;
- (B) determining whether at least one of the plurality of the data blocks (header blocks) within a particular packet is lost in the transmission;
- (C) storing other header blocks that are successfully received within the particular packet in a storage medium for subsequent retrieval;
- (D) subsequently transmitting a request for retransmission of the particular packet containing the lost header block to the source node; and

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(E) combining the stored header blocks with the lost header block retrieved from the subsequent transmission in sequential order, wherein when the retransmission of the particular packet contains a lost header block, transmitting a request for retransmission to the source node only when a complete packet cannot be formed by the combining of the stored header blocks and the retransmitted header blocks of the particular packet. (See Fig. 3, pg. 11, line 34 to pg. 13, line 31). Sipola does not disclose that the data blocks are payload blocks. However, it would have been a matter of design choice to a person of ordinary skill in the communication art, at the time the invention was made, to set the data blocks as payload blocks. This is because Sipola discloses that the invention may vary within the scope of the attacked claims (pg. 19) and Sipola also discloses that the transmitted data in the header blocks can be checked and corrected by transmitting and retransmitting of the original header blocks so that data in the payload blocks can also be checked and corrected like the header blocks as desired.

As per claims 8 and 14, these claims are also rejected under the same rationale as set forth in claims 1-7.

As per claims 15-16, these claims are also rejected under the same rationale as set forth in claim 1.

4. Claims 2-5, 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sipola (WO 0045543) as applied to claims 1-8 above, and further in view of Choi et al ("A Class of Adaptive Hybrid ARQ Schemes for Wireless Links" IEEE, Vol. 50, No. 3, May 2001).

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As per claims 2-5, the teaching of Sipola has been discussed above. Sipola does not disclose the steps of monitoring and identifying erroneous received data blocks during transmission and performing error correction to recover the lost data blocks and if the error correction fails performing the steps (c) through (e). However, Choi et al disclose a Hybrid of FEC and ARQ to detect and correct data blocks errors and if the errors are uncorrectable, retransmission of the packet is requested. (See pg. 778, col. 2, section A. A Hybrid of FEC and ARQ to pg. 779, line 10). Therefore, it would have been obvious to a person of ordinary skill in the communications art, at the time the invention was made, to incorporate the Hybrid of FEC and ARQ of Choi et al into the invention of Sipola so that the lost data block can be corrected and if the errors are uncorrectable retransmission of the packet is requested.

As per claim 11, the teaching of Sipola and Choi et al have been discussed above. Further Choi et al disclose a Reed-Solomon block coder.

As per claims 12-13, these claims are also rejected under the same rationale as set forth in claims 2-5.

5. Claims 17-19 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sipola (WO 0045543) as applied to claims 1, 8 and 15 above, and further in view of Kwon et al (6,594,262).

As per claims 17, 19 and 9-10, the teaching of Sipola has been discussed above, Sipola does not disclose a demodulator configured to receive and demodulate a modulated signal and a decoder operatively coupled to the demodulator for decoding the demodulated packets.

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However, Kwon et al disclose a demodulator coupled to receive and demodulate a modulated signal and a decoder operatively coupled to the demodulator for decoding and correcting burst error. Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to incorporate the demodulator that configured to receive and demodulate a modulated signal and a decoder operatively coupled to the demodulator for decoding the demodulated packets of Kwon et al into the invention of Sipola so that burst error can be corrected. (See col. 1, 50-60).

As per claim 18, the teaching of Sipola and Kwon et al have been discussed above. Kwon et al further disclose an error correction means for performing error correction to recover the erroneously received data blocks. (col. 3, lines 16-23).

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,


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will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phung My Chung whose telephone number is 703-305-9686. The examiner can normally be reached on Monday-Friday from 9:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Decady, Albert can be reached on (703) 305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9000.



Phung My Chung  
Primary Patent Examiner  
Technology Center 2100